

Notice of Allowability

Application No.

10/739,147

Examiner

Douglas N. Washburn

Applicant(s)

SIMAKOV ET AL.

Art Unit

2863

Am

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed 5 December 2005.
2. ☒ The allowed claim(s) is/are 1-8 and 11-17.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☒ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

DETAILED ACTION
EXAMINER'S AMENDMENT

Drawings

1 The following changes to the drawings have been approved by the examiner and agreed upon by applicant:

Annotate drawing figures 1-5, 6A, 6B, 7A, 7B, 8A and 8B, submitted 29 October 2004, "Replacement Sheet".

In order to avoid abandonment of the application, applicant must make these above agreed upon drawing changes.

Response to Amendment

2 Applicant amendment overcomes §102(b) rejection of claims 1, 3, 5, 7, 8 and 12 and the rejection is withdrawn.

Applicant amendment overcomes §103(a) rejection of claims 2, 4, 6 and 11 and the rejection is withdrawn.

Allowable Subject Matter

3 Claims 1-8 and 11-17 are allowed.

Reasons for allowing claims 13-15 were indicated in office action mailed 6 June 2005.

The following is an examiner's statement of reasons for allowance:

Claim 1 recites, in part, "said input object defining a characteristic part of a cutting tool, the input module means permitting the selection of input objects and inputting their input parameters and making a supply of measurement objects accessible, from among which measurement objects are selected and linked with input objects or input parameters". This feature in combination with the remaining claimed structure avoids the prior art of record.

Claims 2-7 depend from claim 1.

Claim 8 recites, in part, "actuating a measurement program module for generating, from the chosen selection of measurement objects and their linkage with input objects, a measurement program for controlling a measuring device, wherein there is determined from the selected input objects, which are each linked with a machining operation and from the associated inputs, a geometrical model that defines the surface of a tool, wherein the geometric model is displayed". This feature in combination with the remaining claimed structure avoids the prior art of record.

Claims 11 and 12 depend from claim 8.

Claim 16 recites, in part, "display module means for visually displaying a geometric model that defines the surface of a tool resulting from the chosen selection of input objects and the inputs". This feature in combination with the remaining claimed structure avoids the prior art of record.

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input objects and the inputs". This feature in combination with the remaining claimed structure avoids the prior art of record.

Claim 17 recites, in part, "measurement parameters are defined on the basis of the selected input objects and associated input parameters and wherein inspection points are among the measurement parameters". This feature in combination with the remaining claimed structure avoids the prior art of record.

It is these limitations, which are not found, taught or suggested in the prior art of record, and are recited in the claimed combination that makes these claims allowable over the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

4 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Douglas N. Washburn whose telephone number is (571) 272-2284. The examiner can normally be reached on Monday through Thursday 6:30 AM - 4:30 PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Barlow can be reached on (571) 272-2269. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DNW

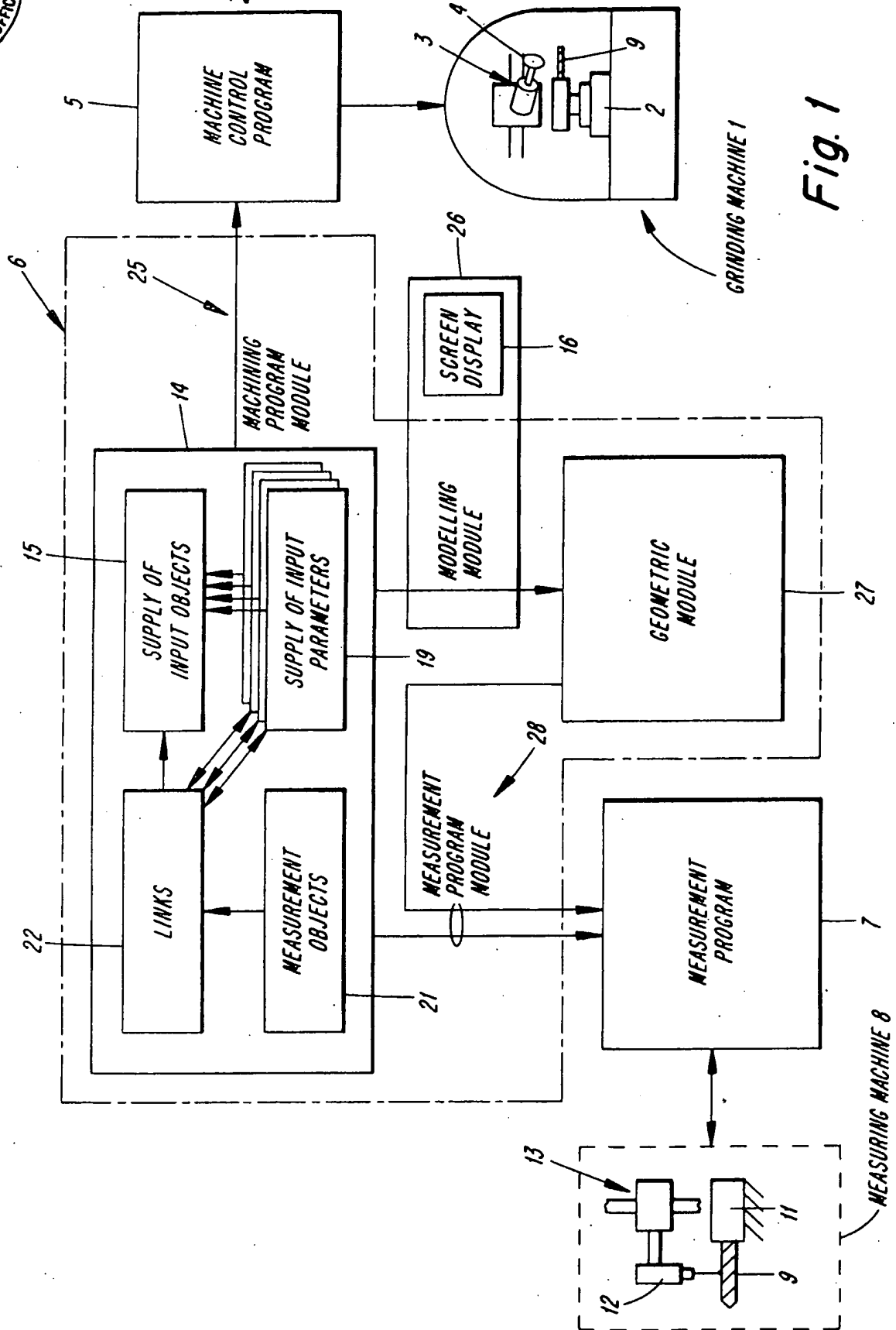

John Barlow
Supervisory Patent Examiner
Technology Center 2800

APPLN. FILING DATE: DECEMBER 19, 2003
TITLE: APPARATUS FOR INTEGRATED TOOL
MANUFACTURE AND METHOD THEREFOR
INVENTOR(S): MICHAEL SIMAKOV ET AL.
APPLN. SERIAL No.: 10/739,147 SHEET 1 OF 11

SHEET 1 OF 11

REPLACEMENT SHEET

Fig. 1



DM 12/15/05 approved



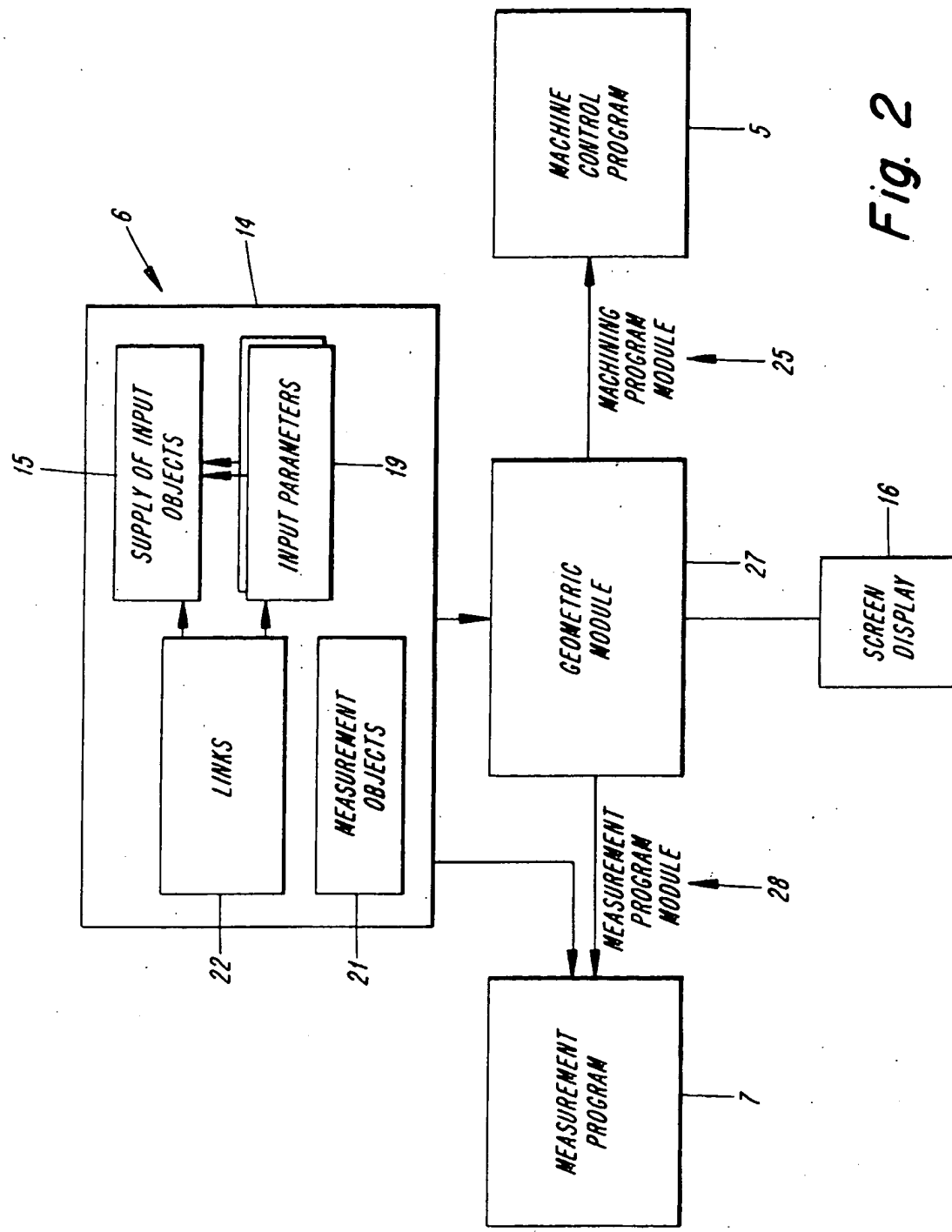


Fig. 2

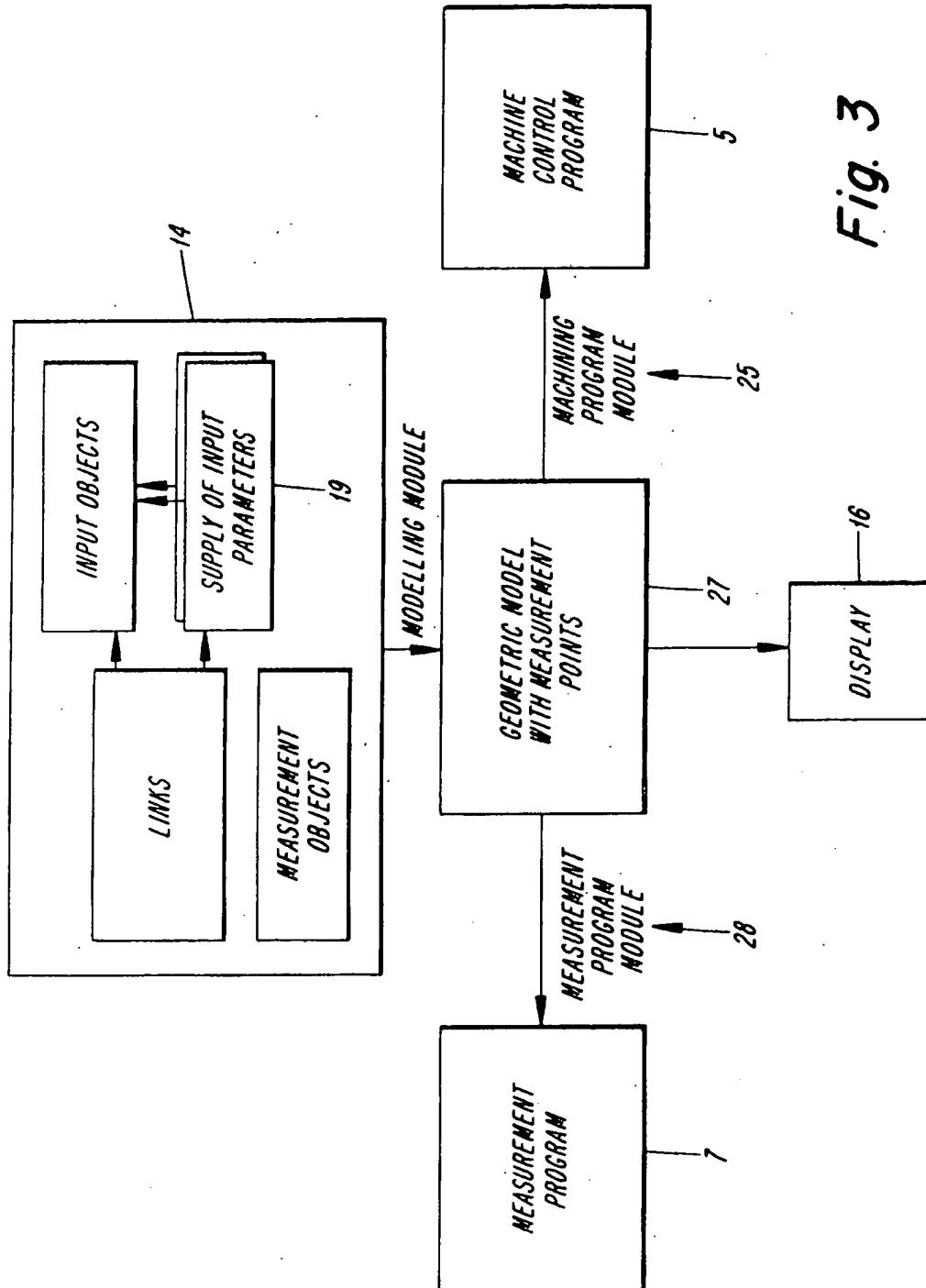
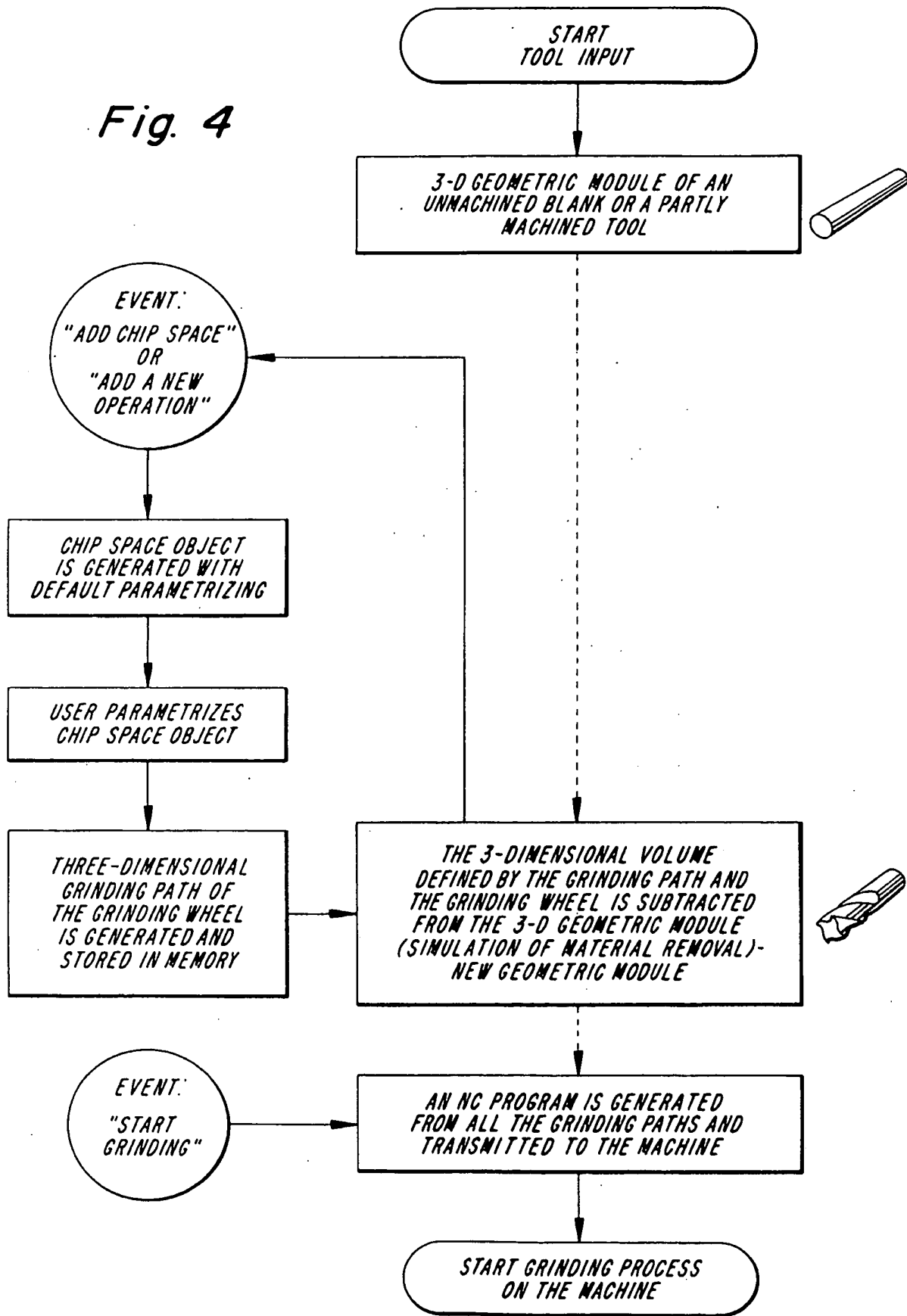


Fig. 3

Fig. 4



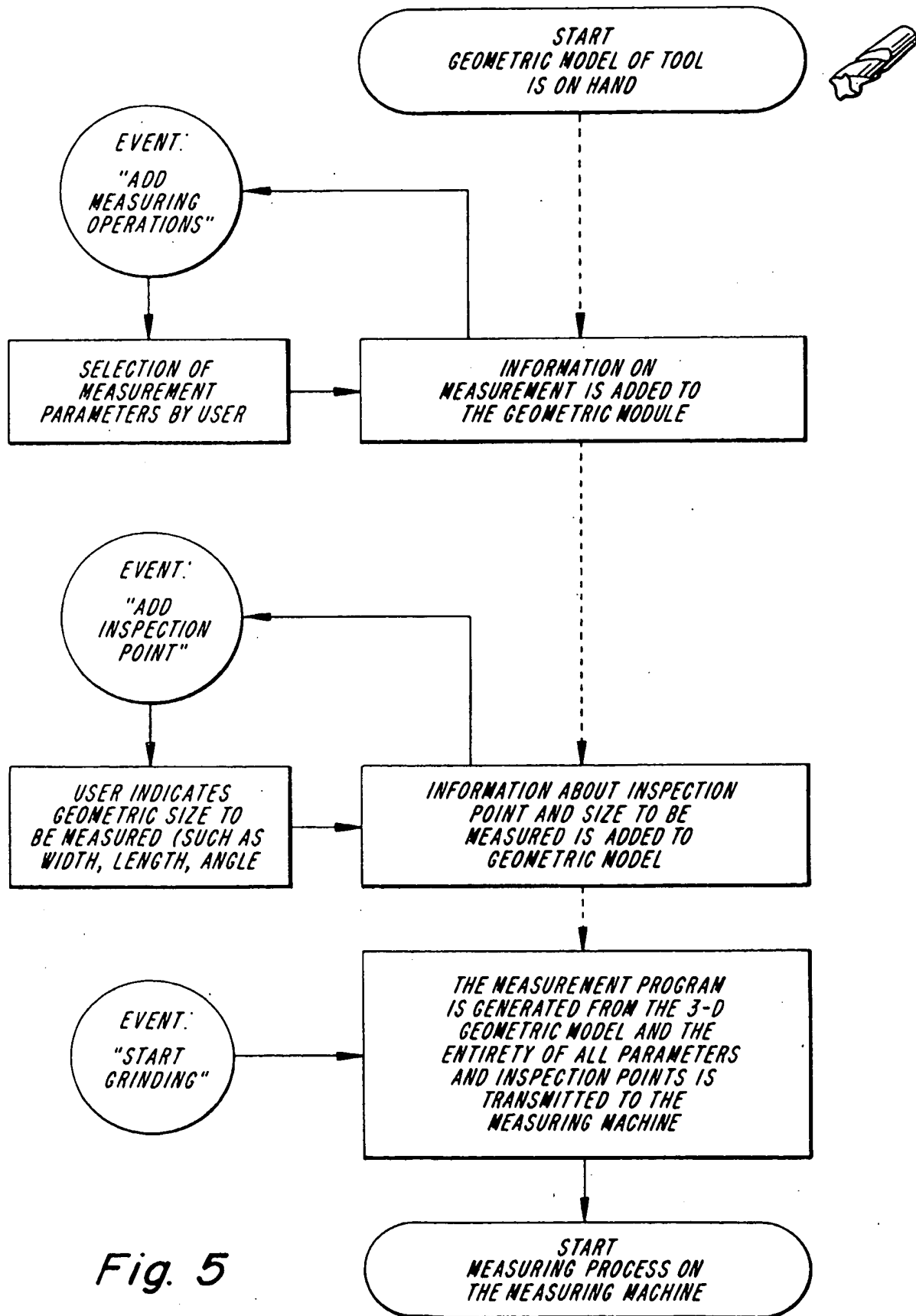


Fig. 5

Soft-XXI Grinding Studio - IMTS_02

File Edit View Color Tool Wheel Machine Help

Idn: StepTool

A °
 C °
 X mm
 Y mm
 Z mm

Simulate ☒ Grind ☐

Position % Type

◀ Primary - Tooth 2 ▶

Grind	Operation	Wheel
<input checked="" type="checkbox"/>	[P] Probing, End Of Tool	
<input checked="" type="checkbox"/>	[F] Fluting	1V1
<input checked="" type="checkbox"/>	[C] Clearance Step 1, Od	11V9
<input checked="" type="checkbox"/>	[C] Clearance Step 2, Line	11V9
<input checked="" type="checkbox"/>	[C] Clearance Step 2, Od	11V9
<input checked="" type="checkbox"/>	[G] Gash	12V9
<input checked="" type="checkbox"/>	[C] Clearance Ef	11V9

☒ ☐ ☐ ☐ ☐ ☐ ☐ ☐

Profiles ▼

Wheels ▼

Machine ▼

Cross Section ▼

Measurement ▼

23

Panels

Error Messages ▼

FIG.6A

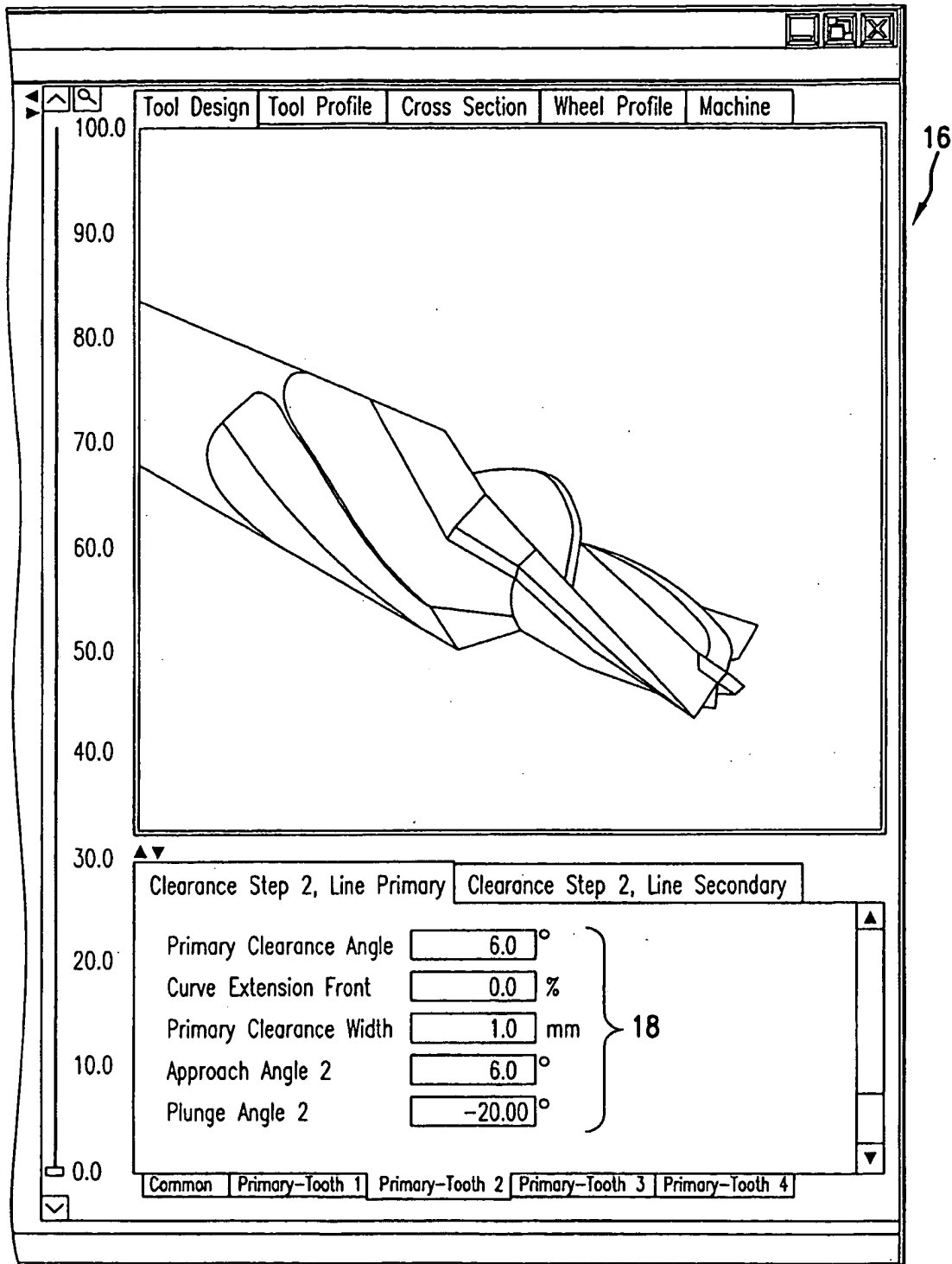


FIG.6B

Soft-XXI Grinding Studio - IMTS_02

File Edit View Color Tool Wheel Machine Help

Idn: StepTool

A °
 C °
 X mm
 Y mm
 Z mm

Simulate Grind ☐

Position % Type

◀ Primary - Tooth 2 ▶

Grind	Operation	Wheel
<input checked="" type="checkbox"/>	<input type="text" value="P"/> Probing, End Of Tool	
<input checked="" type="checkbox"/>	<input type="text" value="F"/> Fluting	<input type="text" value="1V1"/>
<input checked="" type="checkbox"/>	<input type="text" value="C"/> Clearance Step 1, Od	<input type="text" value="11V9"/>
<input checked="" type="checkbox"/>	<input type="text" value="C"/> Clearance Step 2, Line	<input type="text" value="11V9"/>
<input checked="" type="checkbox"/>	<input type="text" value="C"/> Clearance Step 2, Od	<input type="text" value="11V9"/>
<input checked="" type="checkbox"/>	<input type="text" value="G"/> Gash	<input type="text" value="12V9"/>
<input checked="" type="checkbox"/>	<input type="text" value="C"/> Clearance Ef	<input type="text" value="11V9"/>
<input checked="" type="checkbox"/>	<input type="text" value="C"/> <input type="text" value="1"/> <input type="text" value="2"/> <input type="text" value="3"/>	<input type="text" value="1"/> <input type="text" value="2"/> <input type="text" value="3"/>
Profiles ▼		
Wheels ▼		
Machine ▼		
Cross Section ▼		
Measurement ▼		

24 {

23 {

Panels

Error Messages ▼

FIG.7A

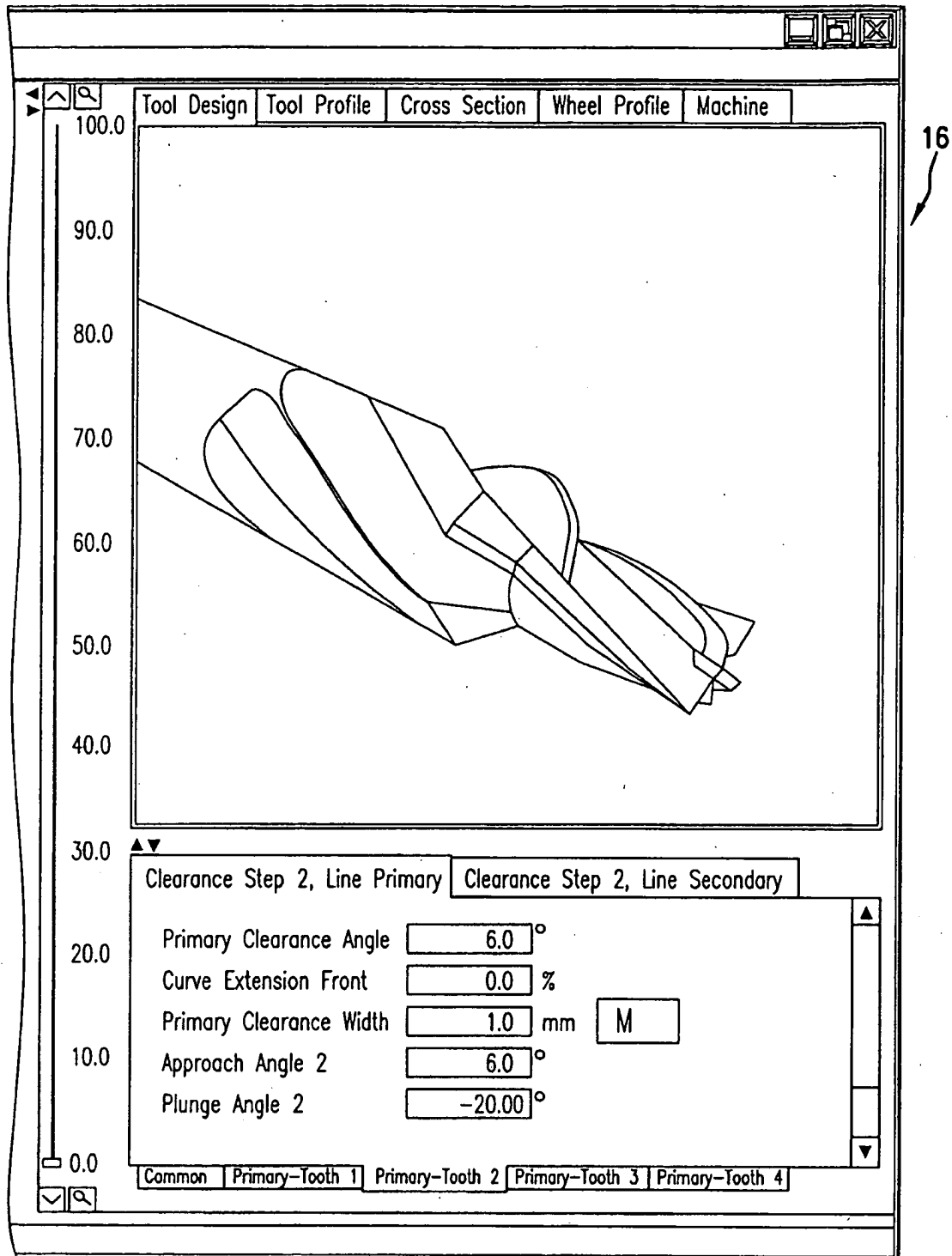


FIG.7B

Soft-XXI Grinding Studio - IMTS_02

File Edit View Color Tool Wheel Machine Help

Idn: StepTool

A °
 C °
 X mm
 Y mm
 Z mm

Simulate Grind

Position % Type

◀ Primary - Tooth 2 ▶

Grind	Operation	Wheel
<input checked="" type="checkbox"/>	<input type="text" value="P"/> Probing, End Of Tool	
<input checked="" type="checkbox"/>	<input type="text" value="F"/> Fluting	◀ 1V1
<input checked="" type="checkbox"/>	<input type="text" value="C"/> Clearance Step 1, Od	◀ 11V9
<input checked="" type="checkbox"/>	<input type="text" value="C"/> Clearance Step 2, Line	◀ 11V9
<input checked="" type="checkbox"/>	<input type="text" value="C"/> Clearance Step 2, Od	◀ 11V9
<input checked="" type="checkbox"/>	<input type="text" value="G"/> Gash	◀ 12V9
<input checked="" type="checkbox"/>	<input type="text" value="C"/> Clearance Ef	◀ 11V9

☒

Profiles ▼

Wheels ▼

Machine ▼

Cross Section ▼

Measurement ▲

Po..	Coordinates	Ø	Move
A	23.176 -8.035 1.510	16.352	N1-N1
B	23.139 -8.054 0.286	16.119	N1-N1

Measurement Function ▼

Measured Distance mm

Measured Angle °

XYZ

Panels

Error Messages ▼

Move: Fluting Tooth 2

FIG.8A

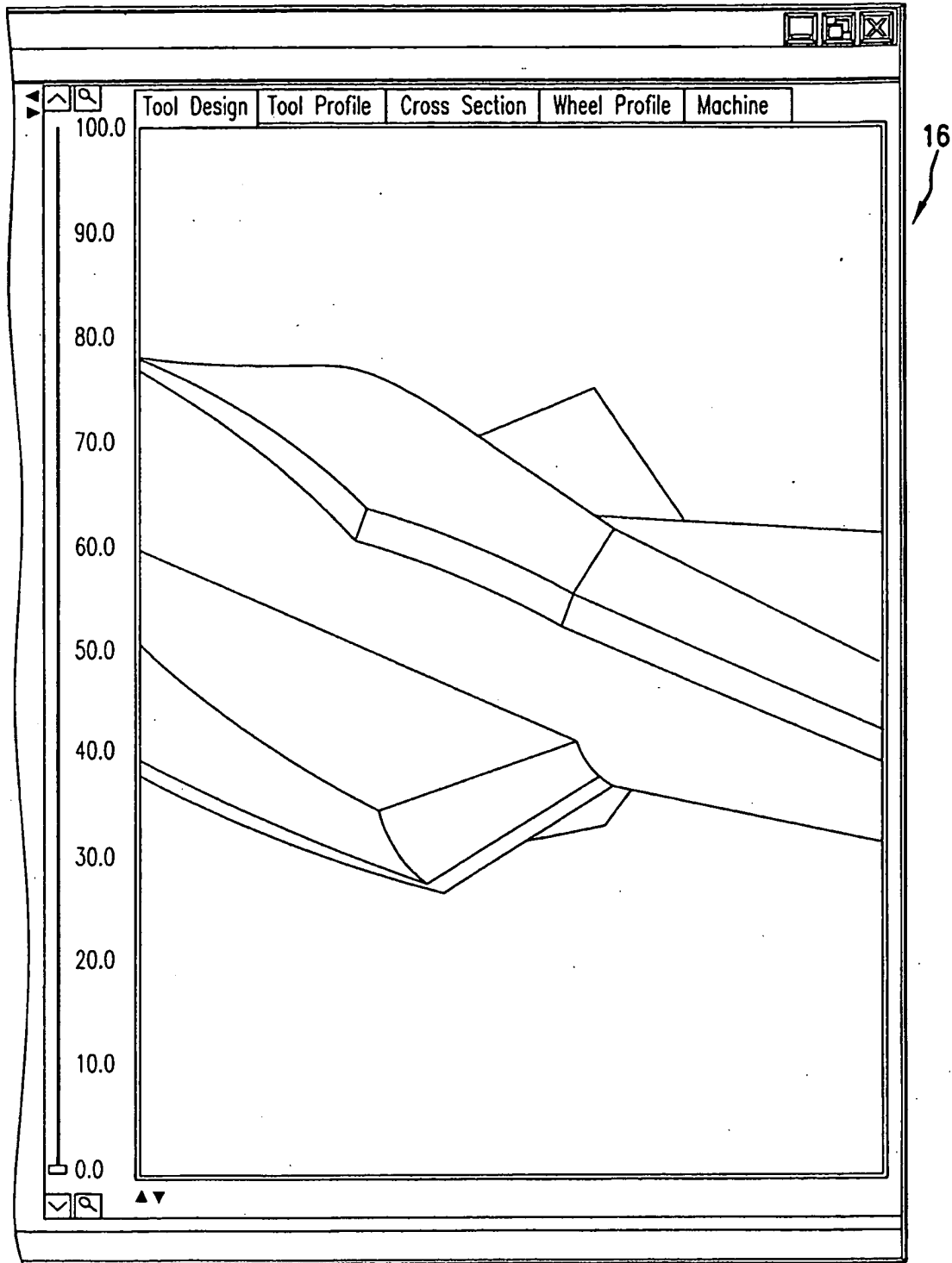


FIG.8B